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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

FORTUNA, JOSE A

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,748	Applicant(s) MORTON RISE, HENSEN	
	Examiner José A. Fortuna	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/21/06</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

1. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Claim Objections

2. Claim 2, 13, -14, and 23 are objected to because of the following informalities: "g/m²" should be changed to --g/m²--; "per cm²" should be changed to --per cm²--. Appropriate correction is required.

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3. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. It is unclear what category of invention the claim is drawn to a method or the product or the use of the product, therefore, it is unclear how this further limits the parent claim that is drawn to a method.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 2, 10-11 and 17, a broad range or limitation followed by linking terms (e.g., preferably, maybe, for instance, especially, in particular) and a narrow range or limitation within the broad range or limitation is considered indefinite since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the

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decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949).

Claim 1 the phrase "consisting exclusively" renders the claim indefinite since it is unclear if the term has been used to mean "consisting" or "consisting essentially of," which are the transitional phrases used in the US patent prosecution.

In claim 1 the phrase "pressing and embossing" renders the claim unclear since it is unclear if there are two operations, i.e., the pressing and the embossing, or it refers to the embossing by pressing, (which is what is normally done).

In Claim 7 the phrase "the penetration" lacks of sufficient antecedent basis.

In claim 7 the phrase "the penetration of the web" renders the claim indefinite, since it is unclear how the web is penetrated, i.e., by the embossing process or it refers to the penetration of the latex into the web?

Claim 9 is vague and indefinite since it is unclear if those pressures are the embossing pressure or other pressure, i.e., to consolidate the fibers.

In claim 11 the phrase "...the fiber layer while forming layers" is not understood.

Claim 21 is vague and indefinite since the category of the invention is unknown, i.e., it is unclear if it is a process, a product or something else.

In claim 21 the phrase "according to a standardized method," renders the claim indefinite, as to what is considered to be standard. Note that the standards can vary in the future and therefore, the metes and bounds of patent protection desired cannot be ascertained.

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Claim 22 recites the limitation “the content of superabsorbent polymers” in lines 1-2.

There is insufficient antecedent basis for this limitation in the claim. Note that the use of SAP is neither disclosed in claim 1 nor claim 21.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al., US Patent No. 6,893,525.

Schmidt et al. teach a method of making a dry-laid web, i.e., air laid, in which papermaking fibers are deposited onto a foraminous belt/fabric with low moisture content, i.e., air laying technique, then the web is pressurized and embossed and then a latex binder is added to either one surface of the formed web or to both surfaces of the web and then the binder is cured to bond the fibers, see column 4, line 45 through column 5, line 8. Schmidt et al. teach that such sequence of steps is very common in the art and it is called, pre-embossing process, which is as its name indicates the embossing is done prior to the bonding of it, which is opposed to the post-embossing technique in which the bonding is done prior to the embossing, see column 1, lines 28-33, see also US Patent No. 4,476,078. Schmidt et al. teach the formation of webs with grammage in the claimed

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range, i.e., overlapping grammage, see column 5, lines 56-62, i.e., they disclose basis weight between 25 to 400 pounds per 3000 ft², (converts to about 40 to about 651 g/m²). They also teach the use of super absorbent polymers, column 6, lines 14-22 and teach that the air laid webs can be made by the methods of US Patent No. 5,128,082 which is incorporated by reference and such reference teaches that the SAP can be either added to the fibers or added to the consolidated web, see column 5, lines 7-26. Schmidt et al. teach that the binder, which is preferably latex, is sprayed onto the web and it is well known that when latex is sprayed, the latex is an very diluted aqueous solution, i.e. greater than 90% water, so that the binder particles do not clog the spraying nozzles¹. Schmidt et al. teach also the use of vacuum to assist the penetration of the latex into the fibers, see figure 1, stations **42** and **48** and better explained in the US Patent No. 5,128,082 which was incorporated by reference. Even though Schmidt et al. do not explicitly teach the lineal pressure², they incorporated by reference the teachings of US patent No. 4,612,231, and this patent shows that it is common to consolidate the web at lineal pressure between 50 to 300 lbs/lineal inch, see column 5, lines 59-63 of the mentioned patent, such range overlapping the claimed range. As to the configuration of the embossing rolls, Schmidt et al. teach that it is preferred for the roll to have sinusoidal configurations, with raised bosses, i.e., tooth bosses, see column 8, lines 33-63.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

¹ See US 5,824,191 see examples or US Patent Application Publication No. 2005/0045295, see ¶-[0102]-[0104], Just to mention a couple.

² Since it is not known what exerts this pressure, i.e., the consolidation pressure or the embossing pressure, for the purpose of this action, it would be considered the consolidation pressure.

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8. Claims 1-7, 13-16, 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Callahan et al., US Patent No. 4,135,024.

Callahan et al. teach a method of making dry-laid webs in which the web is formed, then pressed and embossed and then bonded with a latex and then cured, see column 3, lines 25-57; column 8, lines 9-48 and figure 3. In column 9, lines 1-3 Callahan et al. teach that the process produces a web with grammage between 0.5 to about 8 oz./yds², (17 to about 271 g/m²), which falls within the claimed range. Figure 1, shows the use of a toothed embossing roll.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure in the art of "Embossing Dry-Laid Webs."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/José A Fortuna/
Primary Examiner
Art Unit 1791

JAF